

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8, MONTANA OFFICE FEDERAL BUILDING, 10 West 15th St, Suite 3200 HELENA, MONTANA 59626

Ref: 8MO

April 2, 2008

Mr. Glen McNitt, District Ranger Rexford Ranger District 1299 U.S. Highway 93 N Eureka, Montana 59917

Re:

CEO # 20080057, EPA Comments on

Young Dodge Project DEIS

Dear Mr. McNitt:

The Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the Draft Environmental Impact Statement (DEIS) for the Kootenai National Forest's Young Dodge Project in accordance with EPA responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. 4231 and Section 309 of the Clean Air Act. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major Federal agency action. EPA's comments include a rating of both the environmental impact of the proposed action and the adequacy of the NEPA document.

The EPA supports conduct of vegetation management activities that reduce hazardous fuels and fire risk in wildland urban interface (WUI) areas near homes and structures where there is high fire risk, and restoration of declining tree species such as Ponderosa pine and western larch. We do recommend that you consider a modification to Alternative 1, the current preferred alternative, to include the closure of the segments of currently open roads #303 and #7168 that are proposed with Alternative 3. We believe it is appropriate to close these roads to meet the open road density standards for MA 12 in the Forest Plan, and thus, protect wildlife security and connectivity.

In addition, we want to indicate that we have no objections to the prescribed burning and other treatments in old growth stands that are proposed in Alternative 1 to reduce ladder fuels and fire risk, but which are not included in Alternative 3, since treatments that reduce fuel loads and fire risk in old growth appear to promote long-term protection and sustainability of old growth stands. We also support the slightly higher amount of road BMP improvements in Alternative 1 (3 miles additional road BMP implementation), over Alternative 3, and recommend that such treatments be included in the preferred alternative.

We are pleased that the proposed project includes no new road construction, and would decommission 12 miles of existing road and place 27 miles of roads in long-term storage. EPA fully supports road BMP and drainage improvements, and road decommissioning and reductions in road density, since these are critical to protecting aquatic health. Reductions in road density, especially road stream crossing density, are often correlated with improved aquatic health, as well as improved wildlife habitat and security. We note that there is also often a relationship between higher road density and increased forest use and increased human caused fire occurrences. Reduction in road density, therefore, may also reduce risks of human caused fires, which could be important in an area with high fuels/fire risk and/or WUI issues.

We are pleased that all proposed harvest and fuels treatment activities would be conducted with strict adherence to applicable Best Management Practices (BMPs) identified in Appendix 2, and management requirements and design criteria in Table 2-7 to mitigate effects to soil, water quality, and other resources. We agree that the proposed BMPs, management requirements and design criteria, and adherence to INFISH Standards and Guidelines within Riparian Habitat Conservation Areas (RHCAs) should minimize adverse effects to water quality and beneficial uses.

We did not see clear identification and disclosure of the proposed methods of logging or yarding trees for the proposed timber harvests in the DEIS. We generally encourage use of less ground disturbing logging methods as much as possible (e.g., skyline, helicopter, and logging during winter on snow or frozen ground), and could not clearly determine the extent of proposed use of less damaging logging methods. We believe such information should be more clearly disclosed in the FEIS, since the method of logging is relevant to the extent of ground disturbance and potential soil and water impacts.

We also note that the DEIS indicates that the cumulative detrimental soil disturbance levels may approach the Regional Standard of 15 percent detrimental soil disturbance on several units (i.e. units 12, 21, 212, 220). We emphasize the importance of conducting adequate field soil monitoring and analysis to assure that the Region 1 soil quality thresholds are not exceeded, especially in units 12, 21, 212, and 220 near the Regional detrimental disturbance Standard.

The EPA's further discussion and more detailed questions, comments, and concerns regarding the analysis, documentation, or potential environmental impacts of the Young Dodge Project DEIS are included in the enclosure with this letter. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the DEIS has been rated as Category EC-2 (Environmental Concerns - Insufficient Information). A copy of EPA's rating criteria is attached. We recommend additional analysis and information to fully assess and mitigate all potential impacts of the management actions.

The EPA appreciates the opportunity to review and comment on the DEIS, and the opportunity to review the proposed project in the field. If we may provide further explanation of our comments please contact Mr. Steve Potts of my staff in Helena at 406-457-5022 or in Missoula at 406-329-3313 or via e-mail at potts.stephen@epa.gov. Thank you for your consideration.

Sincerely,

/s/ John F. Wardell Director Montana Office

Enclosures

cc: Larry Svoboda/Julia Johnson, EPA 8EPR-N, Denver Mark Kelley, MDEQ, Helena

EPA COMMENTS ON THE YOUNG DODGE PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT

Brief Project Overview:

The Kootenai National Forest (KNF), Rexford Ranger District developed the Young Dodge Project EIS to evaluate alternatives and disclose environmental impacts of proposed management activities in the drainages of Young Creek and Dodge Creek. The project purpose and need is to reduce fuel accumulations, both inside and outside of the Wildland Urban Interface, decrease the likelihood of stand-replacing wildfires, restore historical vegetation species, stand structure and historical patch sizes. The project area is located approximately 15miles northwest of Eureka, Montana, on the west side of Koocanusa Reservoir and comprises approximately 37,900 acres of National Forest. Three alternatives were evaluated in detail in the DEIS.

Alternative 1 is the proposed action designed to address the purpose and need, and includes approximately 1912 acres of regeneration harvest, 742 acres of commercial thinning, 357 acres roadside salvage, 58 acres of post and pole harvest, 1958 acres of prescribed burning with mechanical pre-treatment, 1236 acres of prescribed maintenance burning, 811 acres of prescribed ecosystem burning, 200 acres of salvage associated with burning. It would produce 9751 MBF of timber. Approximately 100 miles of roads would have BMP improvements; 12 miles of road would be decommissioned; 27 miles of road would be placed in storage; 9 miles of unauthorized roads would be added to the transportation system, and 0.4 miles of road reconstructed. Alternative 1 would require two project-specific Forest Plan amendments (i.e., MA 12 Wildlife and Fish Standard #7 to allow regeneration harvest that exceed 40 acres when combined with existing openings; and MA 12 Timber Standard #2 to allow harvest adjacent to existing openings in big game movement corridors), and one programmatic amendment (MA 12 Facilities Standard #3 to allow an open road density to exceed an average density of 0.75 miles per square mile within the contiguous MA). Additionally, it would require the approval of the Regional Forester to create openings exceeding 40 acres.

<u>Alternative 2</u> is the No Action alternative, which provides a baseline for comparison of the environmental effects of the other alternatives.

Alternative 3 was developed to address the purpose and need while meeting all Forest Plan standards. It addresses the significant issues of harvesting in big game movement corridors between existing openings in MA 12, harvesting new units in MA 12 that are adjacent to existing units that are not providing suitable hiding cover, creating harvest large openings (greater than 40 acres) in MA 12, and exceeding the MA 12 open road density standard. The alternative responds to these issues by dropping units, modifying unit boundaries, or closing currently open roads to avoid exceeding the MA 12 open road density standard. Fuels treatments included in old growth habitat, designated or undesignated, under Alternative 1 were not included in this alternative. The project-specific Forest Plan amendments described in Alternative 1 would not be required, although Regional Forester approval to create openings exceeding 40 acres would be required. Alternative 3 includes approximately 1618 acres of

regeneration harvest, 863 acres of commercial thinning, 324 acres roadside salvage, 58 acres of post and pole harvest, 1076 acres of prescribed burning with mechanical pre-treatment, 1236 acres of prescribed maintenance burning, 483 acres of prescribed ecosystem burning, 200 acres of salvage associated with burning. It would produce 9056 MBF of timber. Approximately 97 miles of roads would have BMP improvements; 12 miles of road would be decommissioned; 27 miles of road would be placed in storage; 9 miles of unauthorized roads would be added to the transportation system, and 0.4 miles of road reconstructed.

Comments:

1. Thank you for including clear narrative discussions and maps describing alternatives and showing the project area and features for the area, as well as tables providing important information and features of the alternatives in Chapters 2 (Tables 2-1 to 2-6). Thank you also for providing Table 2-7 identifying management requirements and project design criteria features (pages II-2-7 to II-23), and BMPs in Appendix 2 and a Monitoring Plan in Appendix 3. The narrative, maps and tables facilitate improved project understanding, help define issues, and assist in evaluation of alternatives providing a clearer basis of choice among options for the decisionmaker and the public in accordance with the goals of NEPA.

Alternatives

- 2. The proposed methods of logging or yarding trees for timber harvests are not clearly identified. We encourage use of less ground disturbing logging methods as much as possible (e.g., skyline, helicopter, and logging during winter on snow or frozen ground), and did not see clear disclosure of the acreage of harvest units using the different logging methods. We see references to tractor logging and helicopter and skyline cable logging (page III-111), but it is not clear how much of each type of logging is proposed, or which units are proposed for particular logging methods. We believe such information should be more clearly disclosed in the FEIS, since the method of logging is relevant to the extent of ground disturbance and potential soil and water impacts.
- 3. Only two action alternatives, Alternative 1 and Alternative 3, have been fully evaluated in the DEIS. These alternatives are similar, but Alternative 3 would drop old growth treatments and modify some timber harvests that may affect big game hiding cover, resulting in Alternative 3 dropping 294 acres of regeneration harvest, adding 100 acres of commercial thinning, reducing prescribed burning by 882 acres, and reducing roadside salvage by 33 acres. Neither alternative includes new road construction, and both alternatives decommission 12 miles of road and put 27 miles of road in storage and reconstruct 0.4 mile of road, and both alternative have almost 100 miles of road BMP implementation (although there would be 3 miles less road BMP implementation in Alternative 3). Alternative 3 would also close 1.19 miles of road #303 and 0.17 miles of road #7168, that are both currently open year long, to bring the open road density in MA 12 down to the Forest Plan standard of 0.75 mi/mi² average road density (page II-3).

These roads would remain open in Alternative 1 and the current MA 12 open road density of 0.81 mi/mi² would remain.

The EPA supports conduct of vegetation management activities that reduce forest fire risks and restore historical vegetation species, stand structure, and patch sizes, that are conducted in an environmentally protective manner. We particularly support conduct of activities to reduce hazardous fuels and fire risk in wildland urban interface (WUI) areas near homes and structures where there is high fire risk, and restoration of declining species such as Ponderosa pine and western larch. In addition we support reductions in open road density to improve wildlife security and connectivity. We also do not oppose prescribed burning or other treatments in old growth stands that reduce fuel loads and fire risk in such stands, since such actions appear to promote long-term protection and sustainability of old growth stands.

Accordingly, we recommend that a modified preferred alternative be considered that would include the proposed Alternative 1 treatments that would reduce ladder fuels and fire risk in old growth stands, but also close roads #303 and #7168, so that open road density standards in MA12 can be met.

Soils

4. Thank you for disclosing landtypes and associated erosion hazards in the analysis area (Table 3-1, page III-7). Table 3-1 shows that landtypes 252, 357, and 407 are rated as having "severe" sediment hazards for timber management, and landtypes 101, 102, 111, 114, 322, 323, 357, and 407 have "severe" sediment hazards for road construction/maintenance. It is difficult to for the DEIS reader to compare the alternatives maps (Maps 2-1 and 2-2) showing harvest units, with Map 3-2 showing landtypes, to decipher which harvest units may be on which landtypes. Many of the color codes for landtypes on Map 3-2 are similar. It would be of interest to provide a table showing proposed tractor harvest acreage on each landtype, particularly the landtypes with severe sediment hazards to allow the reader to better evaluate soil effects from tractor harvests and road work.

We recognize that the DEIS states that landtype 102 is the only landtype of concern within the analysis area (page III-7), and that only an underburn is proposed on this landtype. It appears to us, however, that Map 3-2 shows other landtypes with "severe" sediment hazards within the analysis area. Further information and/or clearer disclosure regarding proposed tractor harvest and road work on landtypes with severe sediment hazards would be appreciated.

5. Thank you for disclosing percent detrimental soil disturbance for each alternative in Table 3-4, pages III-12). We note that the cumulative detrimental soil disturbance approaches the Regional Standard of 15 percent detrimental soil disturbance on several units (i.e. units 12, 21, 212, 220). Will adequate field monitoring and analysis be carried

out to assure that the Region 1 soil quality thresholds are not exceeded, especially in units 12, 21, 212, and 220?

We generally recommend avoidance of timber harvest and road construction in areas with high risk of sediment production or erosion potential and areas highly susceptible to mass failure, and encourage use of harvest/yarding methods that reduce ground disturbance and sediment production and transport risks when harvesting timber on erosive soils or steep slopes to reduce adverse effects to soil and water quality (e.g., skyline, helicopter, and logging during winter on snow or frozen ground). We are pleased that measures are shown in the Table 2-7 management requirements and design criteria and the Appendix 2 BMPs to reduce soil disturbance (e.g., ground based harvests would occur during dry, frozen or snow covered conditions, operation of equipment on slash mats and use of existing skid trails where feasible, etc.). We also presume helicopter logging and skyline cable logging is proposed on some units, but as noted earlier just where less damaging logging methods may be used is not clear.

6. We are also pleased that the DEIS states that coarse woody debris retention would allow maintenance of short and long-term soil productivity (page III-11).

Water

- 7. Thank you for disclosing that there are no water quality impaired streams in the area, (with the exception of Lake Koocanusa, page III-73). We are pleased that all proposed harvest and fuels treatment activities would be conducted with strict adherence to applicable Best Management Practices (BMPs) identified in Appendix 2. As noted earlier, we also appreciate the disclosure of management requirements and design criteria in Table 2-7 to mitigate effects to soil, water quality, and other resources. We agree that the proposed BMPs, management requirements and design criteria, and adherence to INFISH Standards and Guidelines within Riparian Habitat Conservation Areas (RHCAs) should minimize adverse effects to water quality or beneficial uses (page III-73).
- 8. In addition, we are pleased that there will be no new road construction for this project (page III-74), since as you know sediment from road construction as well as erosion of roads is a cause of adverse water quality impacts in forests. Proper maintenance of the road system is important, since erosion of poorly maintained roads with inadequate road drainage is a major cause of adverse water quality effects. We are pleased that 97 to 100 miles of road BMPs would be implemented with the proposed project (e.g., installing and replacing culverts, installing drainage dips or surface water deflectors, armoring drainage structures, grading and replacement of aggregate to reinforce wet surface areas, ditch construction and cleaning, page II-10). EPA fully supports proposed road maintenance and BMP and drainage improvements to forest roads, since these are critical to protecting aquatic health.

We are also pleased that 12.25 miles of road will be decommissioned and 27 miles of road placed in storage. EPA supports road decommissioning and reductions in road density, since increasing road density, especially road stream crossing density, has been inversely correlated with aquatic health in many areas, and lower road densities are often associated with improved wildlife habitat and security. Also, there is often a relationship between higher road density and increased forest use and increased human caused fire occurrences. Reduction in road density, therefore, may also reduce risks of human caused fires, which could be important in an area with high fuels/fire risk and/or WUI issues.

- 9. Thank you for including evaluation and discussion of the potential water yield effects of the proposed harvest and burning activities. Table 3-4 (page III-78) shows changes in peak flow percentage for alternatives in Young and Dodge Creek, with a 5% increase in Dodge Creek and 3% increase in Young Creek, which are stated to be within historic and allowable Forest Plan ranges of variability. These waterbodies are also stated to have very stable stream channels (page III-73), thus, allowing resiliency to withstand adverse effects to channel beds and banks from peak flows.
- 10. We are pleased that the DEIS predicts that there will be no measurable direct or indirect effects to fish or fish habitat with implementation of either action alternative (page III-93), and that there would be "no effect" on the threatened bull trout (page III-95).
- 11. EPA considers the protection, improvement, and restoration of wetlands and riparian areas to be a high priority. Wetlands and riparian areas increase landscape and species diversity, and are critical to the protection of designated water uses. Executive Order 11990 requires that all Federal Agencies protect wetlands. In addition national wetlands policy has established an interim goal of **No Overall Net Loss of the Nation's remaining wetlands**, and a long-term goal of increasing quantity and quality of the Nation's wetlands resource base. (see "Presidential Wetland Policy of 1993" at website, http://www.usace.army.mil/inet/functions/cw/cecwo/reg/aug93wet.htm). Wetland impacts should be avoided, and then minimized, to the maximum extent practicable, and then unavoidable impacts should be compensated for through wetland restoration, creation, or enhancement.

Riparian Habitat Conservation Areas (RHCAs) are an important management element in the Interior Columbia Basin (ICB) Strategy to maintain and restore the health of watersheds, riparian, and aquatic resources to sustain aquatic and terrestrial species and provide water of sufficient quality and quantity to support beneficial uses (see http://www.icbemp.gov/html/icbstrat.pdf; and "A Framework for Incorporating the Aquatic and Riparian Habitat Component of the Interior Columbia Basin Strategy into BLM and Forest Service Plan Revisions," http://www.icbemp.gov/html/aqripfrm7804.pdf). It is important that proposed activities be consistent with the riparian management objectives described in the ICB Strategy, which include:

- * Achieve physical integrity of aquatic ecosystems;
- * Provide an amount and distribution of woody debris sufficient to sustain physical and biological complexity;
- * Provide adequate summer and winter thermal regulation;
- * Provide appropriate amounts and distributions of source habitats for riparian- or wetland-dependent species; and
- * Restore or maintain water quality and hydrologic processes.
- * Restore or maintain naturally functioning riparian vegetation communities.

We are pleased that RHCAs would be delineated around all streams and wetlands (page III-75), to prevent adverse effects to riparian and aquatic resources. It is important that no timber harvest, temporary road construction, or operation of heavy equipment occur in wetlands, and that treatment units be reviewed in the field to identify the presence of wetlands, and that wetlands be flagged on the ground and on the Sale Area Map so that timber contractors will be able to avoid them.

12. Thank you for providing the Monitoring Plan in Appendix 3. The EPA endorses the concept of adaptive management whereby effects of implementation activities are determined through monitoring (i.e., ecological and environmental effects), and considers monitoring to be an integral part of land management. It is through the iterative process of setting goals and objectives, planning and carrying out projects, monitoring impacts of projects, and feeding back monitoring results to managers so they can make needed adjustments, that adaptive management works. In situations where impacts are uncertain, monitoring programs allow identification of actual impacts, so that adverse impacts may be appropriately mitigated.

We particularly believe that water quality/aquatics monitoring is a necessary and crucial element in identifying and understanding the consequences of one's actions, and for determining effectiveness in BMPs in protecting water quality. The achievement of water quality standards for non-point source activities occurs through the implementation of BMPs. Although BMPs are designed to protect water quality, they need to be monitored to verify their effectiveness. If found ineffective, BMPs need to be revised, and impacts mitigated. We encourage adequate monitoring budgets for conduct of aquatic monitoring to document BMP effectiveness and long-term water quality improvements associated with road BMP work and road decommissioning.

Appendix 3 indicates that stream flow, temperature, suspended sediment, channel geometry and fish population and structure will be monitored. We often ask for additional information on aquatic monitoring and recommend additional parameters for monitoring, however, since this proposed project includes no new road construction, and includes decommissioning roads and putting roads in storage, and adequate BMPs and erosion and sediment control measures, and the project area does not include water quality impaired streams, we consider the level of aquatic monitoring to be adequate.

Air Quality

13. The action alternatives include a significant amount of prescribed burning (the preferred alternative includes 1958 acres of prescribed burning with mechanical pre-treatment, 1236 acres of maintenance burning, 811 acres of ecosystem burning, 2654 acres of underburning following harvest, and 415 acres of pile burning, page II-5). The EPA supports judicious and well planned use of prescribed fire to reduce hazardous fuels and restore fire to forest ecosystems.

As you know smoke from fire contains air pollutants, including tiny particulates (PM_{10} and $PM_{2.5}$) which can cause health problems, especially for people suffering from respiratory illnesses such as asthma or emphysema, or heart problems. Particulate concentrations that exceed health standards have been measured downwind from prescribed burns. In addition, prescribed fire could have impacts on Class II areas and Federally-designated Class I areas, and smoke can reduce visibility and diminish the appreciation of scenic vistas (e.g., Glacier National Park and Cabinet Mountains Wilderness Area). Although we agree that smoke impacts from prescribed fire carried out during periods of favorable conditions for smoke dispersion are often less hazardous than smoke impacts during a wildfire.

We appreciate the DEIS discussion of project area air quality conditions and effects from proposed burning activities, as well as discussion of mitigation measures to reduce burning emissions, and Tables 3-1 and 3-3 showing particulate amounts produced by prescribed burning, and Table 3-2 showing factors influencing smoke effects to sensitive areas (pages III-59 to III-68).

We are pleased that prescribed burning will be done in compliance with requirements of the Montana/Idaho Airshed Group Smoke Management Plan (page III-68). It may be of interest to the public to display the website for the Montana/Idaho State Airshed Group, http://www.smokemu.org. Prescribed burning done in accordance with a certified State Smoke Management Plan such as the Montana/Idaho Airshed Group is consistent with EPA's Interim Air Quality Policy on Wildland and Prescribed Fire. This is Federal policy which reconciles the competing needs to conduct prescribed fires to manage vegetation and restore fire to fire adapted ecosystems while at the same time maintaining clean air to protect public health. A copy of the Interim Air Quality Policy can be found at: http://www.epa.gov/ttn/oarpg/t1/memoranda/firefnl.pdf. EPA air quality guidance can be found at http://www.epa.gov/air/caa/.

It is important to disclose that even though prescribed burns will be scheduled during periods of favorable meteorological conditions for smoke dispersal, the weather can change causing smoke not to disperse as intended. This can be especially problematic for smoldering pile burns when a period of poor ventilation follows a good ventilation day. Also, if there is potential for smoke to drift into populated areas there should be public notification prior to burns so sensitive people (e.g., people suffering from respiratory illnesses such as asthma or emphysema, or heart problems) can plan accordingly.

We also recommend that efforts be made to educate home owners on the wildland-urban interface who build in fire adapted forest ecosystems regarding the need to use less flammable building materials and to manage fuel and vegetation near their homes (see websites www.firewise.org and www.firelab.org). General sound fire management practices include:

- * Reducing the dangerous build-up of dead trees, branches, and vegetative matter on forest floors by using prescribed fire or the selective thinning, pruning, or cutting and removal of trees by mechanical means.
- * Whenever possible, mechanical thinning can be used as an effective "pretreatment" to prescribed burning, although we also urge consideration of water quality, fishery, and ecological impacts along with air quality impacts when planning management actions (e.g., focusing mechanical treatments near roads to avoid or minimize new road construction). Mechanical treatments may be appropriate where the risk of the escape of prescribed burns is high and where nearby home developments may be threatened.
- * Using smoke management techniques during burns to minimize smoke in populated areas as well as visibility effects. Each prescribed burn site will have unique characteristics, but smoke impacts can be minimized by burning during weather conditions with optimal humidity levels and wind conditions for the types of materials being burned. Smoke impacts can also be minimized by limiting the amount of materials and acreage burned at any one time. Careful scheduling of the many burning activities to coincide with proper climatological and meteorological conditions helps avoid air quality problems.
- * Implementing fire hazard awareness and mitigation programs for the public. Closure of back country roads during high fire risk periods may reduce potential for human caused fires.

Vegetation Treatments

14. We appreciate the DEIS Chapter III discussion of vegetation and disturbance processes and fuels, which provides valuable information regarding forest composition and structure, natural succession and disturbance ecology, fire regimes, fuels and fire risks. We support vegetative treatments to reduce fire risks, susceptibility to insect and disease agents, increase structural diversity, and restore Ponderosa pine and western larch vegetative communities that are in decline.

We generally favor understory thinning from below, slashing and prescribed fire to address fuels build-up with reduced ecological impacts. We also favor retention of the larger more vigorous trees, particularly trees of desirable tree species whose overall composition is in decline (e.g., western larch, western white pine, whitebark pine,

Ponderosa pine). The larger healthier trees are generally long-lived and fire resistant, and provide important wildlife habitat. Harvest of many live mature trees could potentially increase fire risk, as well as reduce wildlife habitat. If the forest canopy is opened too much by removal of large fire resistant trees it may promote more vigorous growth of underbrush and small diameter trees that would increase fuels and fire risk in subsequent years, contrary to the fire risk reduction purpose and need.

We are pleased that the DEIS states that most live, fire resistant overstory trees would be retained during regeneration harvests, and that leave trees would generally be Ponderosa pine, western larch and Douglas fir 14 inches or greater diameter (page II-6).

Wildlife/T&E Species

- 15. The DEIS states that proposed treatments in 152 acres of old growth in Alternative 1 are designed to maintain current old growth attributes (removal of ladder fuels, prescribed fire), by lessening the threat of stand removal by a wildfire and lessening competition favoring large diameter trees, with an intent of maintaining old growth structure, function, and health (page III-105). We do not oppose prescribed burning or other treatments in old growth stands that reduce fuel loads and fire risk in such stands, which may promote long-term protection and sustainability of old growth stands.
- 16. With the relatively large amount of proposed regeneration harvest it appears that there is potential for significant impacts to cavity habitat. The DEIS states that Rexford Ranger District snag management protocols will be utilized (page III-20), and that all action alternatives would provide at least 40% snag levels following management activities (page III-109), or riparian 60% primary cavity excavator potential populations levels, and that these levels are consistent with Forest Plan standards to maintain self-sustaining populations of snag dependent wildlife (page III-112). We did not see a clear statement in the DEIS, however, that impacts to cavity habitat species like the pileated woodpecker would avoid loss of viability to the population of the species. We recommend that the FEIS provide a more clearly stated disclosure of effects on the viability to the population of cavity habitat species.
- 17. We are pleased that the biological assessment for threatened and endangered species has been conducted and determined that while the project "may affect, it is not likely to adversely affect" the threatened Canada lynx, grizzly bear or gray wolf (pages III-162, III-167, III-173). If it is determined that the finally selected project alternative could adversely affect any threatened or endangered species (e.g., grizzly bear, lynx, gray wolf, bull trout) the final EIS should include the associated U.S. Fish & Wildlife Service (USFWS) Biological Opinion or formal concurrence for the following reasons:
 - (a) NEPA requires public involvement and full disclosure of all issues upon which a decision is to be made;

- (b) The CEQ Regulations for Implementing the Procedural Provisions of NEPA strongly encourage the integration of NEPA requirements with other environmental review and consultation requirements so that all such procedures run concurrently rather than consecutively (40 CFR 1500.2(c) and 1502.25); and
- (c) The Endangered Species Act (ESA) consultation process can result in the identification of reasonable and prudent alternatives to preclude jeopardy, and mandated reasonable and prudent measures to reduce incidental take. These can affect project implementation.

Since the Biological Assessment and EIS must evaluate the potential impacts on listed species, they can jointly assist in analyzing the effectiveness of alternatives and mitigation measures. EPA recommends that the final EIS and Record of Decision not be completed prior to the completion of ESA consultation. If the consultation process is treated as a separate process, the Agencies risk USFWS identification of additional significant impacts, new mitigation measures, or changes to the preferred alternative. If these changes have not been evaluated in the final EIS, a supplement to the EIS would be warranted.

Noxious Weeds

18. Weeds are a great threat to biodiversity and can often out-compete native plants and produce a monoculture that has little or no plant species diversity or benefit to wildlife. We are pleased that project design criteria are included for controlling spread of noxious weeds (page II-24), including treating roads; washing equipment etc.. We note that is also important to seed disturbed areas such as skid trails, landings, and areas disturbed by road decommissioning or storage, with weed free native grass seed. We also encourage tracking of weed infestations, control actions, and effectiveness of control actions in a Forest-level weed database.

While we support use of weed control chemicals where needed, we encourage prioritization of management techniques that focus on non-chemical treatments first, with reliance on chemicals being the last resort, since weed control chemicals can be toxic and have the potential to be transported to surface or ground water following application. Early recognition and control of new infestations is encouraged to stop the spread of the infestation and avoid wider future use of herbicides, which could correspondingly have more adverse impacts on water quality, fisheries, and biodiversity

It is important that the water contamination concerns of herbicide usage be fully evaluated and mitigated. Herbicides should be applied at the lowest rate effective in meeting weed control objectives and according to guidelines for protecting public health and the environment. All efforts should be made to avoid movement or transport of herbicides into surface waters that could adversely affect public health, fisheries or other water uses. The Montana Water Quality Standards include a general narrative standard

requiring surface waters to be free from substances that create concentrations which are toxic or harmful to aquatic life.

Herbicide applicators should be advised of the potential for runoff of herbicides at toxic concentrations into the streams. The applicators should take precautions during spraying (e.g., applying herbicide only after careful review of weather reports to ensure minimal likelihood of rainfall within 24 hours of spraying; special precautions adjacent to the stream to reduce runoff potential; etc.). It should be unequivocally stated that no herbicide spraying will occur in streams and wetlands or other aquatic areas (seeps, springs, etc.,). Herbicide drift into streams and wetlands could adversely affect aquatic life and wetland functions such as food chain support and habitat for wetland species. Streams and wetlands in any area to be sprayed be identified and flagged on the ground to assure that herbicide applicators are aware of the location of wetlands, and thus, can avoid spraying in or near wetlands.

For your information, the website for EPA information regarding pesticides and herbicides is http://www.epa.gov/pesticides/. The National Pesticide
Telecommunication Network (NPTN) website at http://nptn.orst.edu/tech.htm which operates under a cooperative agreement with EPA and Oregon State University and has a wealth of information on toxicity, mobility, environmental fate on pesticides that may be helpful (phone number 800-858-7378).

Some suggestions we have to reduce potential water quality and fisheries effects from herbicide spraying are to assure that applicators: 1) are certified and fully trained and equipped with the and appropriate personal protective equipment; 2) apply herbicides according to the label; and 3) use treatment methods that target individual noxious weed plants in riparian and wetland areas (depending on the targeted weed species, manual control or hand pulling may be one of the best options for weed control within riparian/wetland areas or close to water). The herbicide application technique of hand or manual wipe-on (especially applicable for contact systemic herbicides such as glyphosate) may be an option to control individual plants up to the existing water level adjacent to streams or sensitive aquatic sites.

We also recommend that weed treatments be coordinated with the Forest botanist to assure protection to sensitive plants, and coordinated with fisheries biologists and wildlife biologists to assure that sensitive fisheries and wildlife habitat areas are protected. You may also want to consider use of a more selective herbicide (clopyralid) for use in conifer associated communities to reduce impacts on non-target vegetation. We also note that spotted knapweed, which is a prevalent noxious weed species in western Montana, is non-rhizomatous and should be relatively easy to control with lower rates of the most selective low toxicity herbicides.

We believe prevention of weed invasions is the cheapest and best way to control weeds. Measures that we often recommend for preventing spread of weeds from source areas to

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	Ensure that equipment tracks and tires are cleaned prior to transportation to an
uninfes	sted site.
	Focus control efforts at trail heads and transportation corridors to prevent tracking
of seed	l into uninfested areas.
	Attempt to control the spread from one watershed to another to reduce water as a
transpo	ort vector.
	If a localized infestation exists and control is not a viable option, consider
rerouti	ng trails or roads around the infestation to reduce available vectors for spread.
	Establish an education program for industrial and recreational users and
encour	age voluntary assistance in both prevention and control activities.
	Reseed disturbed sites as soon as possible following disturbance.

Other

19. We note that the Abstract at the beginning of the DEIS states that the project area is located approximately 15 miles northwest of Eureka, Montana, whereas it is stated that Chapter 1 (page I-1) that the project area is located approximately 7 miles northwest of Eureka, Montana. We suggest that a consistent description of the distance of the project area from Eureka be used.

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

- **LO - Lack of Objections:** The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.
- **EC - Environmental Concerns:** The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.
- **EO -- Environmental Objections:** The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.
- **EU - Environmentally Unsatisfactory:** The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

- **Category 1 -- Adequate:** EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- Category 2 -- Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.
- Category 3 -- Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.
- * From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.